Entrustable Professional Activities (EPAs): The next step in meaningful assessment of learners

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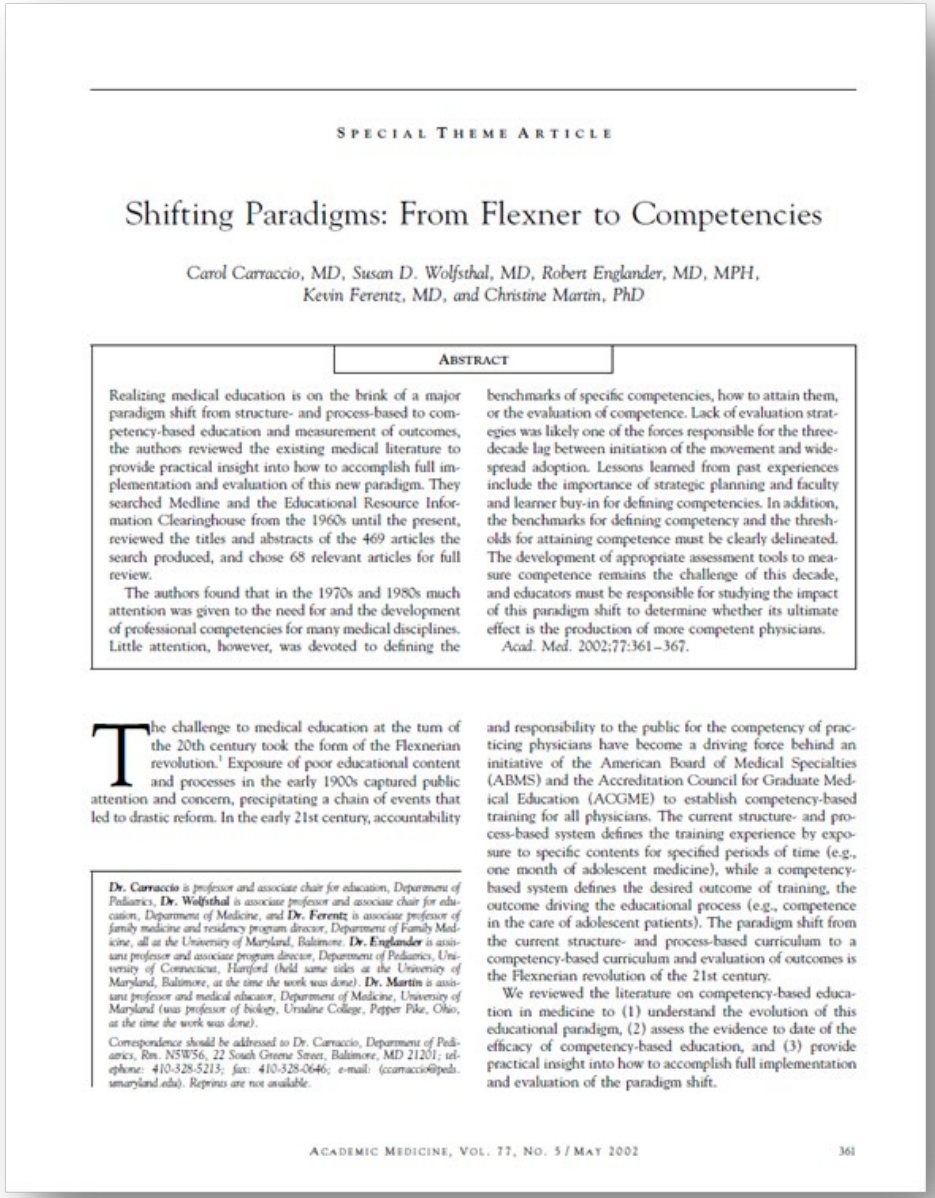
Objectives

- Develop a working knowledge of EPAs and their relationship to competencies and milestones
- Apply that working knowledge to a specific example of a handover communication EPA
- Practice assessment and feedback using the handover EPA assessment form



SPECIAL THEME ARTICLE

Shifting Paradigms: From Flexner to Competencies

Carol Carraccio, MD, Susan D. Wolfsthal, MD, Robert Englander, MD, MPH, Kevin Ferentz, MD, and Christine Martin, PhD

ABSTRACT

Realizing medical education is on the brink of a major paradigm shift from structure- and process-based to competency-based education and measurement of outcomes, the authors reviewed the existing medical literature to provide practical insight into how to accomplish full implementation and evaluation of this new paradigm. They searched Medline and the Educational Resource Information Clearinghouse from the 1960s until the present, reviewed the titles and abstracts of the 469 articles the search produced, and chose 68 relevant articles for full review.

The authors found that in the 1970s and 1980s much attention was given to the need for and the development of professional competencies for many medical disciplines. Little attention, however, was devoted to defining the benchmarks of specific competencies, how to attain them, or the evaluation of competence. Lack of evaluation strategies was likely one of the forces responsible for the three-decade lag between initiation of the movement and widespread adoption. Lessons learned from past experiences include the importance of strategic planning and faculty and learner buy-in for defining competencies. In addition, the benchmarks for defining competency and the thresholds for attaining competence must be clearly delineated. The development of appropriate assessment tools to measure competence remains the challenge of this decade, and educators must be responsible for studying the impact of this paradigm shift to determine whether its ultimate effect is the production of more competent physicians.

Acad. Med. 2002;77:361–367.

The challenge to medical education at the turn of the 20th century took the form of the Flexnerian revolution.[1] Exposure of poor educational content and processes in the early 1900s captured public attention and concern, precipitating a chain of events that led to drastic reform. In the early 21st century, accountability and responsibility to the public for the competency of practicing physicians have become a driving force behind an initiative of the American Board of Medical Specialties (ABMS) and the Accreditation Council for Graduate Medical Education (ACGME) to establish competency-based training for all physicians. The current structure- and process-based system defines the training experience by exposure to specific contents for specified periods of time (e.g., one month of adolescent medicine), while a competency-based system defines the desired outcome of training, the outcome driving the educational process (e.g., competence in the care of adolescent patients). The paradigm shift from the current structure- and process-based curriculum to a competency-based curriculum and evaluation of outcomes is the Flexnerian revolution of the 21st century.

We reviewed the literature on competency-based education in medicine to (1) understand the evolution of this educational paradigm, (2) assess the evidence to date of the efficacy of competency-based education, and (3) provide practical insight into how to accomplish full implementation and evaluation of the paradigm shift.

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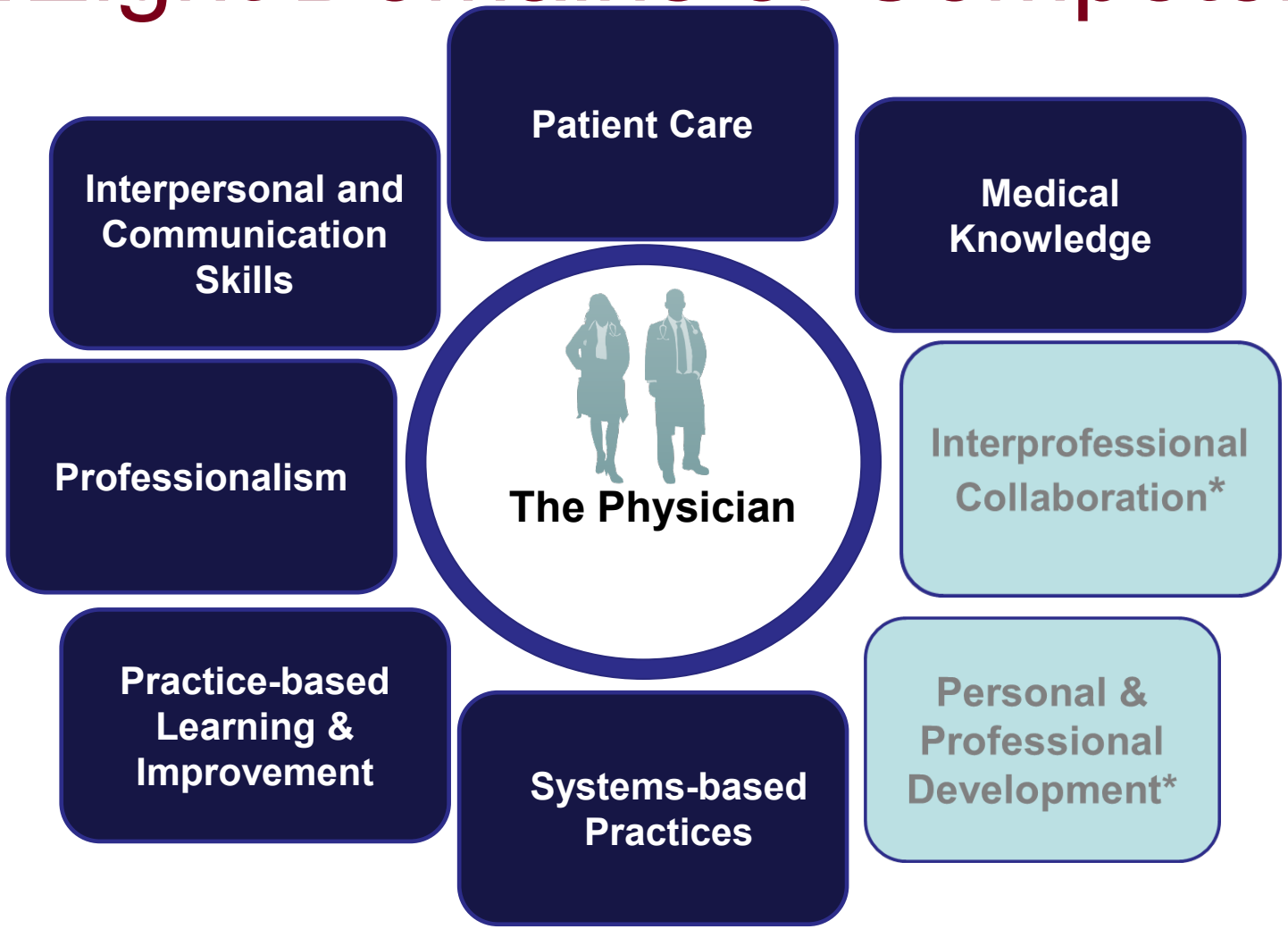
Shifting the paradigm from
fixed time:variable outcome to
fixed outcome:variable time
Medical Education

Step 1: Define the Outcomes

The Vision

- Physicians will spend their careers, from premed to exit from practice, on a developmental trajectory building mastery in 8 domains of competence

…Eight Domains of Competence



"The Complete Physician"

- * From the Core Competencies for Interprofessional Collaboration
- ** From the Pediatric Milestones
- Englander et al. *Academic Medicine*. 2013 Aug;88(8):1088-94.

Step 2-Define the performance levels = milestones

Step 3- The Next Major Hurdle: Assessment of Competence

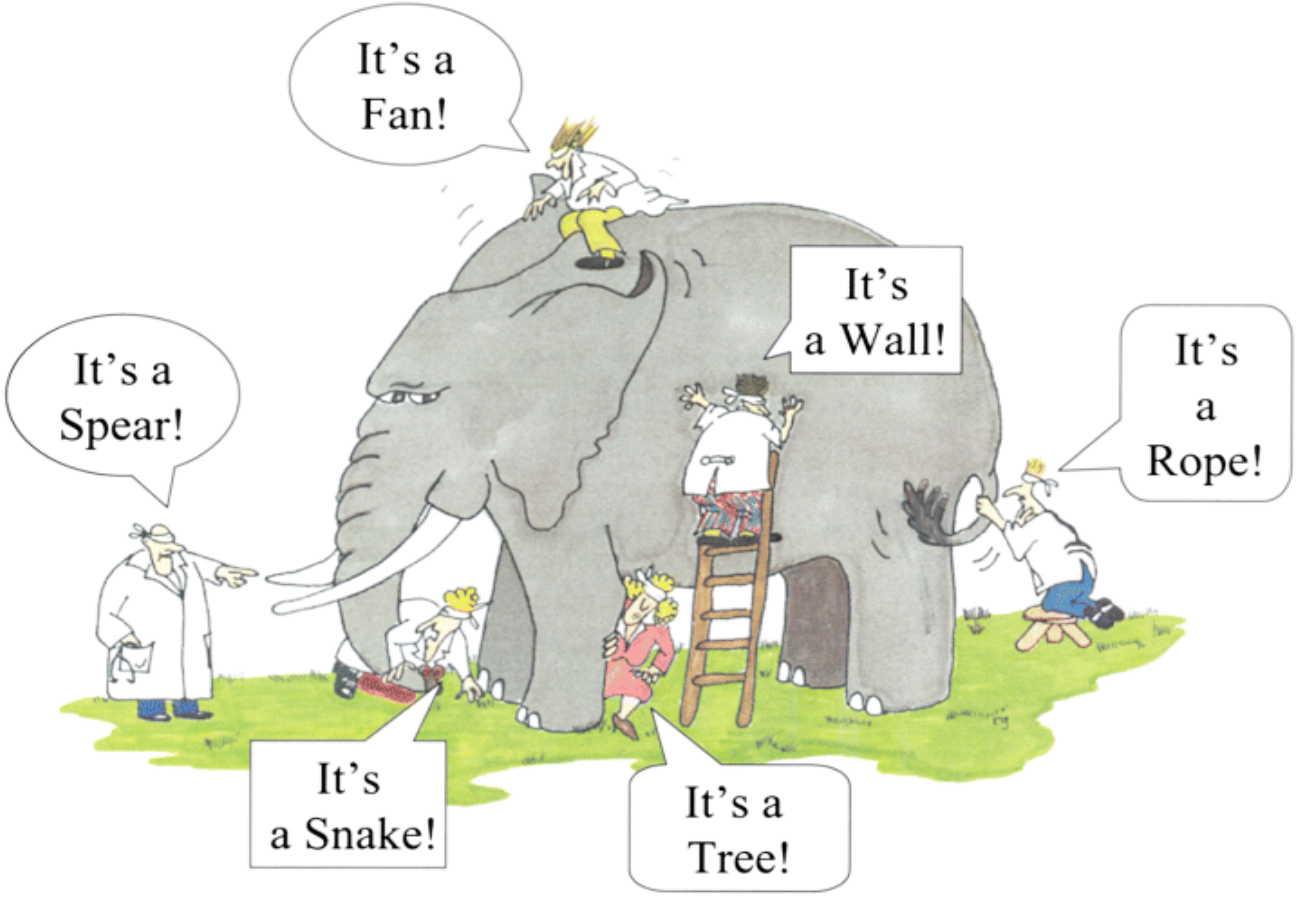
Step 4: Developing Curriculum

Outcomes

Curriculum

Step 5- Evaluating the effectiveness of your CBE program

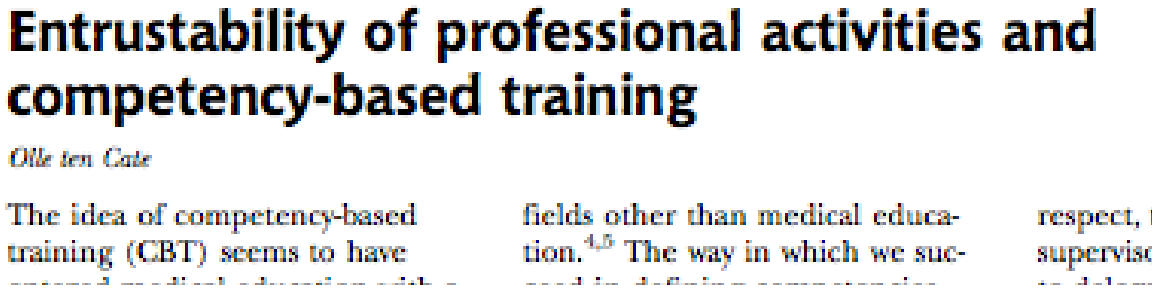
Assessment: The Achilles Heel of CBME



Resolution

Provide an integrative construct that places the competencies and milestones in the context of clinical care

Putting it Back Together….



Entrustability of professional activities and competency-based training

Olle ten Cate

The idea of competency-based training (CBT) seems to have

fields other than medical education.[4,5] The way in which we suc-

respect,
supervis

EPAs

- Provide a practical framework for assessment of competence
  - Competencies: Focus on a single ability but care delivery requires integration of abilities
  - EPAs: Focus on integration of competencies needed to deliver care

- Bring the concept of entrustment to workplace-based assessment
  - Entrustment implies competence but uses a lens of supervision which is a more intuitive framework for clinicians

Entrustable Professional Activities (EPAs)

- Important routine care activities that define a specialty or subspecialty
- Observable and measurable
- Require an integration of competencies within and across domains to perform
- “Entrustable” refers to readiness to safely perform the activity without supervision (GME to practice) or without direct supervision (UME to GME)

From the work of ten Cate and Scheele

Important Distinctions

Competency

- Unit of assessment is the ability of an individual
- Context independent making assessment difficult
- Address the KSA of a specific ability

EPA

- Unit of assessment is the outcome of the activity
- Embedded in a clinical context making assessment meaningful/more intuitive
- Address the KSA of multiple competencies that need to be integrated for care delivery

EPA

- Entrustment refers to the ability to safely and effectively perform a professional activity without (direct) supervision
- Brings trust and supervision into assessment which are intuitive for faculty working with trainees
- Entrustment decisions allow inference about a learner's competence
- Entrustment itself is a "yes-no" decision, but the pathway to entrustment is developmental (think milestones)

Entrustment is Based On Trustworthiness

- Ability or level of KSA
- Conscientiousness
- Telling the truth – absence of deception (truthfulness)
- Knowing one's limits (discernment) and help seeking

Kennedy T et al. Point-of care assessment of medical trainee competence for independent clinical work. *Acad Med*. 2008;83(10 Suppl):S89–92

Reflective Exercise

- How do you know if your current learners are trustworthy?
  - Explicit measurement?
  - Implicit measurement?

EPA

Professional is a modifier of activities that refers specifically to:

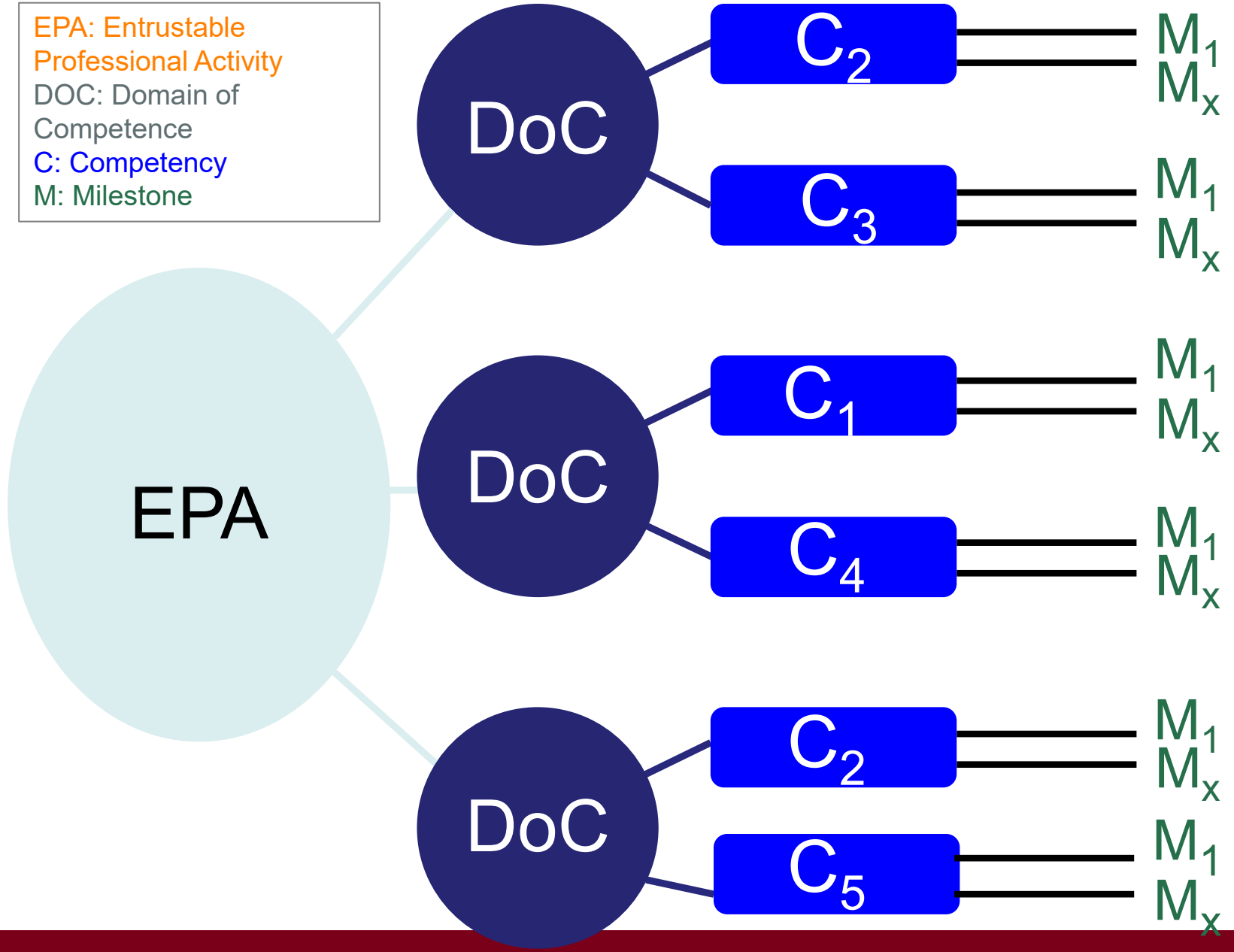
- Area of practice (e.g., specialty)
- Scope of practice (e.g., profession)
- *Learner's place on the educational continuum*

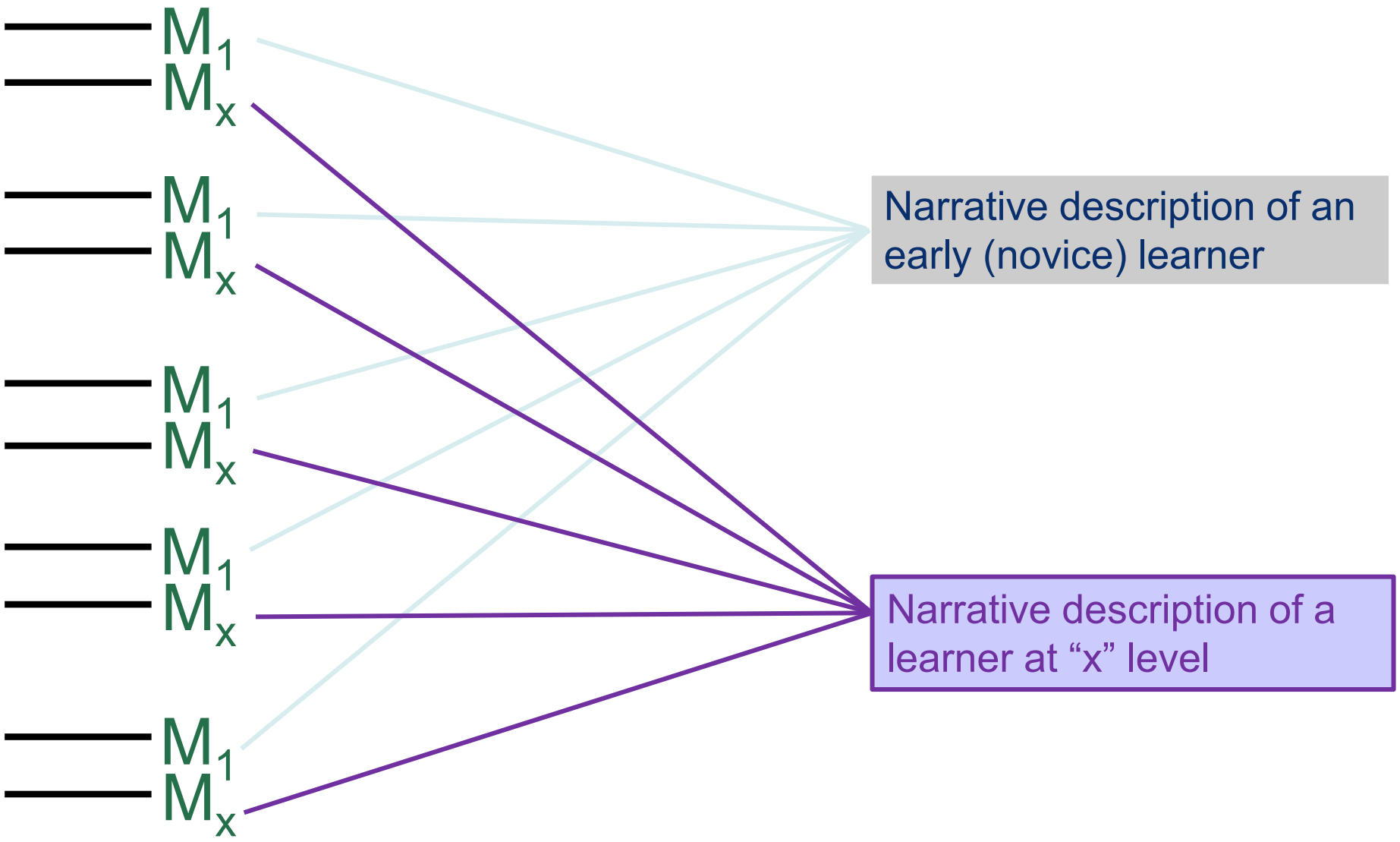
EPA

The Activities:

- Represent the essential work that defines a discipline (in aggregate)
- Lead to a recognized outcome
- Should be independently executable within a given time frame
- Are observable and measurable units of work in both process and outcome
- Require integration of critical competencies and milestones

EPA: Entrustable Professional Activity
DOC: Domain of Competence
C: Competency
M: Milestone




M1
Mx
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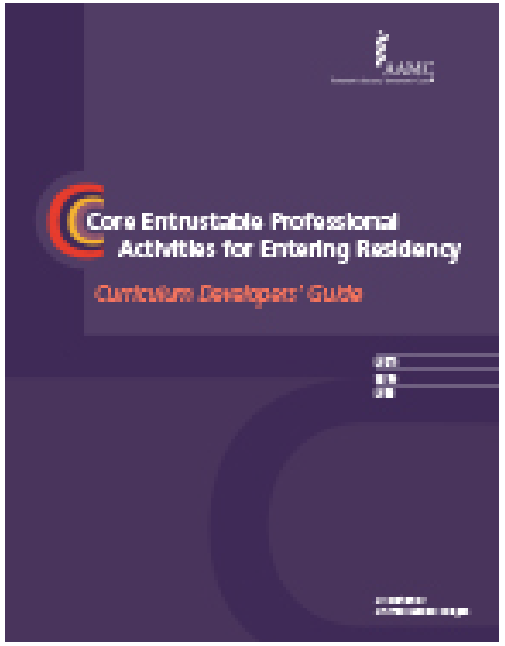
Narrative description of an early (novice) learner
Narrative description of a learner at “x” level

The Core Entrustable Professional Activities for Entering Residency



Core EPAs for Entering Residency

1) Gather a history and perform a physical examination
2) Prioritize a differential diagnosis following a clinical encounter
3) Recommend and interpret common diagnostic and screening tests
4) Enter and discuss orders/prescriptions
5) Document a clinical encounter in the patient record
6) Provide an oral presentation of a clinical encounter
7) Form clinical questions and retrieve evidence to advance patient care

Core EPAs for Entering Residency

8) Give or receive a patient handover to transition care responsibility
9) Collaborate as a member of an interprofessional team
10) Recognize a patient requiring urgent or emergent care, and initiate evaluation and management
11) Obtain informed consent for tests and/or procedures
12) Perform general procedures of a physician
13) Identify system failures and contribute to a culture of safety and improvement

Informed Observation

1) Read the expected behaviors for the pre-entrustable and entrustable learners
2) Watch the Video
3) Rate the learner
4) What is one piece of feedback you would give the learner to move to the next level

EPA 8:

Give or receive a patient handover to transition care responsibility to another health care provider
or team. EPA 8 pre entrustable and entrustable behaviors.

1. **Observation only:** ***"I did it. The student observed."***
2. **Direct Supervision:** ***"We did it together."***
3. **Direct Supervision:** ***"I supervised and helped the student from time to time."***
4. **Indirect Supervision:** ***"The student did it. I double-checked ALL elements."***
5. **Indirect Supervision:** ***"The student did it. I double-checked KEY elements."***
6. **Indirect Supervision:** ***"The student did it without me around. We reviewed it afterwards."***

Describe any **strengths** you noticed for in performing EPA 8. Note any specific knowledge, skills, or behaviors that were particularly strong.

What does need to do on EPA 8 in the future to move to the next level of entrustment?

Courtesy of Adam Maier, Assessment Systems Analyst, UMN School of Medicine

EPA 8 Bulleted List: Give or receive a patient handover to transition care responsibility

Note: this list applies to both the giver and receiver of information.

Expected behaviors for a pre-entrustable learner

- Uses rigid rules of communication (e.g., a handover template) but cannot adjust based on the audience and/or context.
- Documents patient information in written or electronic handover tools incompletely with errors of both omission and commission.
- Demonstrates variability in transfer of information regarding content, accuracy, efficiency, and synthesis.
- May miss key aspects of the ideal handover, including verbalizing the patient's illness severity and/or providing action planning and/or contingency planning.
- Demonstrates minimal situation awareness of the team's total work load or of the circumstances of the individual to whom one is transferring care.
- Is unable to organize, prioritize, and anticipate patient care needs consistently.
- Demonstrates minimal awareness of known threats to handover communication (e.g., interruptions and distractions).
- Focuses on one's own handover responsibilities with minimal awareness of the workload and concurrent responsibilities of the remainder of the team.

Expected behaviors for an entrustable learner

- Uses a template for the handover communication but can adapt based on patient, audience, setting, or context, including patient disabilities or language barriers.
- Generally documents patient information without errors of omission and/or commission.
- Consistently transfers information regarding content, accuracy, efficiency, and synthesis.
- Organizes and prioritizes information for handover communications.
- Provides key aspects of the ideal handover to the recipient, including verbalizing the patient's illness severity and/or providing action planning and/or contingency planning.
- Demonstrates situation awareness of both the team's total work load and the circumstances of the individual to whom one is transferring care.
- Demonstrates awareness of known threats to handover communication (e.g., interruptions and distractions) by paying attention to the timing and location of the handover communication.

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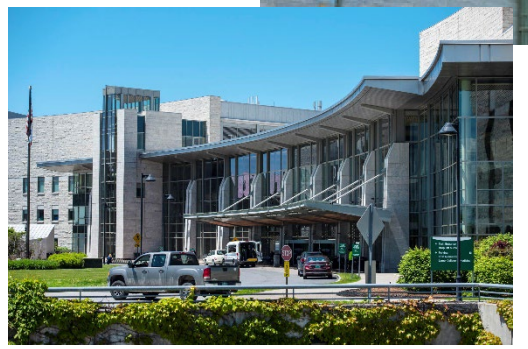
Courtesy of Adam Maier, Data Analyst, UMN School of Medicine


Final
Thoughts

Competencies/Milestones + EPAs Both Are Critical for Assessment

- Competencies & Milestones: A Granular Approach (Telephoto)
  - Assess how well a learner can accomplish some small part of a professional activity (e.g., a complete and accurate HEENT examination)



Competencies/Milestones + EPAs: Both Are Critical for Assessment

- EPAs (integration of competencies): A Holistic Approach (Panoramic)
  - Integrate competencies within a clinical context and assess clusters of behaviors that allow one to carry out a professional activity
  - Map to competencies & milestones – allow for vignette matching

Summary: Why EPAs?

- Make sense to faculty, trainees and the public
- Make assessment more practical by clustering competencies and their milestones into meaningful professional activities
- Add meaning to assessment by focusing on integration of competencies in the context of care delivery and…
- Aligning what we assess with what we do
- Add “trust” to the assessment conversations
- Easy to do! 5 minutes of observation and 2-3 minutes for feedback

Objectives

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Questions/Reflections